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ABSTRACT

A study was conducted to identify and compare the prevalence of communication apprehension among foreign, black, and white students. Data from a survey of basic English and speech classes were used to locate 83 nonapprehensive and 64 apprehensive foreign, black, and white students, who were then identified as low communication apprehensive or high communication apprehensive. The foreign students included Latin American (63%), Middle Eastern (23%), Asian (7%), and European (7%) students. Students completed the Personal Report of Communication Apprehension and the Comparative Rating Scale of Oral Communication Areas (CRSOCA), and the two independent variables were examined as they related to talking with an authority figure, social conversation, group discussion, and public speaking. Among other results the analysis indicated that white groups reported more concern than the foreign group for speaking to authority figures and for group discussion, and that blacks and whites were similar to each other on public speaking and on communicating with authority figures. Several tables are provided, as well as a reference list of 52 items. The CRSOCA instrument is appended. (DF)

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The Effects of Communication Apprehension and Cultural Differences on Selected Communication Behaviors

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The Effects of Communication Apprehension and Cultural Differences on Selected Communication Behaviors

Scholars concerned with oral communication have increasingly focused attention on the effect of communication anxiety. Beginning with the early work of Lomas (1934) who reported in his master's thesis a subjective questionnaire to measure stage fright, to the work of Phillips and of McCroskey, scholars agree that some people exhibit more communication apprehension behaviors than other people and that this apprehension has a negative effect on their communication and on their overall well-being..

Research concerned with fear and anxiety about oral communication has focused on a variety of terms and definitions. Early work on communication apprehension began with a practical concern over anxiety in public presentations, while current investigation treats communication apprehension as a broadly based trait.

Definition

Gerald Phillips of Pennsylvania State University originally defined the reticent person as, "a person for whom anxiety about participation in oral communication outweighs his projection of gain from the situation," (Phillips, 1968) and identified nine features of reticence: shakiness, negative physical symptoms, necessity to discontinue communication, inability to communicate with 'important' people, peer perception of inadequacy, withdrawal, apologetic, preference for written communication, and inability to talk with parents.

Moreover, Phillips (1968) postulated the situation to involve the whole personality; indeed, many of the interviewees displayed histories of seeking help, either from counselors, psychologists, or clergymen, and talked of a consistent concern over their lack of ability to speak to others. After extensive case studies and investigation with reticent students, Phillips associated reticence with generalized neurotic and phobic behavior (Phillips and Metzger, 1973). More recent study by Phillips changed the definition of reticence to, "People who perceive that they can gain more by remaining silent than they can by participation" (Phillips, 1977), thus deleting anxiety as a cause. He cited lack of skills development as both definition and cause.

Another and perhaps conflicting definition of communication anxiety was developed by James McCroskey (1970) who defined communication apprehension as, "an individual's level of fear or anxiety associated with either real or anticipated communication with another person or persons." McCroskey now considers the construct of communication apprehension a subconstruct of reticence, specifying only fear and/or anxiety as the causal element, considering avoidance and withdrawal behaviors as falling beyond the scope of "communication apprehension" (McCroskey, 1977). Still a third related concept is "unwillingness to communicate," a construct similar to reticence. Burgoon's (1976) work focused on a predisposition to avoid communication and argued for causative elements such as apprehension, alienation, low self-esteem, and introversion.

Moving from the general definitions into specific areas of the communication anxiety construct, we consider whether trait or state apprehension exists. Spielberger (1966) and Lamb (1972) have made a distinction between trait apprehension, which is characterized by fear or anxiety with respect to many different types of oral communication encounters. State apprehension, on the other hand, is specific to a given oral communication situation, such as giving a particular speech to a group of strangers or interviewing with an important person for a new job at a given time and place. The most common example of state apprehension is the phenomenon called "stage fright." Research has indicated that stage fright is experienced by most people at one time or other. For example, in a nationwide survey of American adults, Bruskin Associates (1973) found that the most frequently reported fear was that of speaking in public.

While state speech apprehension is a normal experience of most people, trait speech apprehension is not characteristic of normal well-adjusted individuals. People with high levels of trait speech apprehension characteristically experience high levels of apprehension about almost all threatening or nonthreatening oral communication encounters. While people with high levels of trait speech apprehension are far less common than those with occasional high levels of state speech apprehension, the extent of this problem is far greater than many would suspect. Extensive studies (McCroskey, 1970, 1976) of college student populations suggest that approximately twenty percent of the students in major universities may be appropriately described as having high speech apprehension. Similar frequencies have been observed

in public school settings (at each level, K-12), among adult populations, and among senior citizens (McCroskey, 1976).

Etiology

Although the literature respects definitions of speech apprehension along with studies and methods for describing the condition, the information concerning etiology is comparatively sparse and obscure. Clinical studies (Phillips, 1968) reveal three areas of consideration devoted to the possible cause of speech apprehension. First, the environment in which we live demands certain communication patterns. For example many adults who supervise children's behavior tend to regard a quiet child as preferable to a noisy one; much of practical elementary school pedagogy is concerned with maintaining silence at the right time. Thus, the child may not know that adult society expects him to participate and for this reason he is unable to cope with what appear to him as sudden demands that he express his ideas orally to others. Secondly, the environment in which we live may also create an atmosphere where withdrawal from participation in communication may be fostered by homes in which talk has no apparent use other than a vehicle for abuse or ventilation. Evidence shows that low valuation of oral interaction is particularly common in lower socio-economic groups and that limited verbal experience is associated with at least some speech retardation. Surveys indicate (Phillips and Butt, 1966), that many of these persons come from lower socio-economic or ethnic-nationality homes. Third, parental emulation may also be a factor. In homes where children observe hostility of parents toward each other and toward the children it may not be possible

to learn that there are social rewards to be reaped from communication effectiveness.

Case study analyses (Phillips and Butt, 1966) and broader surveys (Wheeless, 1971) also suggest the development of reticense syndrome during early childhood years suggesting that many children enter kindergarten with high levels of communication apprehension already established. Few data point in the direction of communication apprehension being a hereditary function, therefore the cause is thought to lie primarily in a child's experiences during the formative years. Moreover, if the function is not hereditary, and we believe it is a learned trait, it is therefore important that we describe how the child acquired this trait.

John Daly stated that sufficient research does suggest some genetic component to communication apprehension. He cited four studies which compare identical twins with fraternal twins and demonstrate significantly higher intra-class correlations for identical twins for fraternal twins on sociability. In long-term study of such twins, Daly surmised that forty-six percent of the variation in sociability to be attributed to genetic predispositions. He noted that while his research findings suggest that infants and children may enter into home and school environments with inherited predispositions about communication, the nature of the environment will either enhance or decrease heriditary disposition.

The Daly study also revealed that individuals with high speech apprehension reported that during their childhood, their

parents' behaviors relevant to their communication were less positive than those reported by low apprehensives. Moreover, the findings suggested that school can and does have an effect on apprehension with the responses and environment norms established by the school serving to increase or reduce the anxiety. Interestingly enough, the findings showed that by the time individuals reached high school, apprehension has become a stable individual characteristic, and whereas grade school communication patterns significantly modify apprehension level, high school communication patterns do not.

Correlates of Communication Apprehension

Having examined the nature of and etiology of the reticence syndrome, and its related constructs, we turn to the question of variables linked with communication apprehension. The reader will note one particular pattern in this section. The reports cited here primarily deal with communication apprehension as a trait, in which a number of causes may be evident including anxiety or apprehension, phobias, lack of skills, alienation, low self-esteem, introversion, and so on. (McCroskey, 1977; Phillips, 1968). Simply put, we will not focus upon communication apprehension as a state, felt by normal speakers about a particular communication events such as a public speech. We are describing this situation, , as the "pathology of the normal speaker," (Phillips, 1968) which includes related constructs such as shyness, communication apprehension, (Zimbardo, 1977), and unwillingness to communicate (Burgoon, 1976).

Since the reticence syndrome and its related construct communication apprehension have been described as a broad-based personality-type characteristic having a major impact upon an individual's communication behavior (McCroskey, 1970), then it would appear that this characteristic should be correlated with other personality characteristics. In one analysis of this relationship, McCroskey, Daly, and Sorensen(1976) conducted a two phase research project correlating a widely used measure, the Personal Report of Communication Apprehension (PRCA), with the 16 PF Form C (Cattell, Eber, and Tatsuoka, 1970) as well as dogmatism, Machiavellianism, tolerance for ambiguity, need for achievement, and the Rotter index of internal-external locus of control. Of these 21 personality characteristics communication apprehension was significantly correlated with 15. Furthermore, the 16 PF were analyzed in a multiple correlation with the PRCA resulting in a 52 percent explained variance ($R=.72$, $p<.001$). The specific relationships of communication apprehension with the personality variables were as follows: (citing only statistically significant correlations at $p<.05$):

16 PF and Other Measures	Personality Measure	Correlation with CA
Factor A:	Cyclothymia (outgoing, warm hearted, participating, easy-going, now called affectothymia)	-.27
Factor C:	Emotional maturity (calm, mature, faces reality)	.33
Factor E:	Dominance (assertive, aggressive)	-.21
Factor F:	Surgency (enthusiastic, impulsively lively)	-.52
Factor G:	Character (conscientious, persevering, rule bound)	-.21

Factor H:	Adventurousness (parmia; venturesome, socially bold, uninhibited, spontaneous)	-.54
Factor L:	Trustfulness (alaxia; adaptable, free of jealousy, easy to get along with)	.20
Factor O:	Confidence (untroubled adequacy; self-assured)	-.29
Factor Q3:	Self-control	-.33
Factor Q4:	Anxiety	.50
Dogmatism:	(closed mindedness)	.16
Machiavellianism:	(manipulation, uses others)	.19
Tolerance for ambiguity:	(ability to withstand uncertainty)	-.33
Need to Achieve:	(sense of progress, achievement)	-.15
Internal-External Locus of Control:	(degree of external force controlling life)	.15

The results of this study offer support for the claim that communication apprehension has a broad relationship with an individual's total personality.

In another study of personality correlates of communication apprehension, Rosenfeld and Plax (1976) correlated a battery of 53 personality variables with communication apprehension, as measured in this particular instance by the Phillips and Erickson Reticence scale. The battery of variables came from a series of tests including the California Psychological Inventory (CPI), the measuring instrument for Radicalism-Conservatism, the Dogmatism scale, Edwards Personal Preference Schedule (EPPS), Machiavellianism, the Study of Values scale (VALUES), and the Tennessee Self Concept Scale (TSCS). A factor analysis reduced the total of 53 variables to 25 summary variates. The variate sources were then entered in a multiple discriminant analysis. Their results re-

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vealed that ten personality variables significantly classified reticent individuals from non-reticent individuals. The following variables were among the ten discriminating variables indicating a reticent individual as scoring low on CPI Dominance, indicating inhibition, silence; low on TSCS Social Self, indicating inadequacy in social situation; low on EPPS nurturance, indicating feelings of non-affection; low on TSCS Physical Self, indicating low evaluation of physical appearance and skills; low on EPPS Affiliation, revealing low participation and friendliness; low on CPI Socialization, indicating defensiveness and undependability; low on EPPS Aggression, indicating inability to openly attack contrary points of view. The reticence scores also characterized a reticent individual as scoring high on EPPS Deference, indicating conformity; high on EPPS Test Consistency, indicating a consistent manner in interpersonal relationships; and high on CPI Achievement via Conformance, indicating cooperation and organization. All ten variables produced a discriminant function in which reticents and non-reticents were correctly classified 77% of the time by these variables. In sum, his profile supports other investigations, such as the following clinical data.

Earlier clinical data reported by Phillips and Metzger (1973) associated reticent behavior with a number of characteristics. Neurotic behaviors coincide with the reticent or apprehensive, particularly depression (low tonicity, monotonous and low keyed speech), expression of little emotion, self-disparagement and hysteria. Some reticent communicators show signs of obsessive-compulsive symptoms as they ritualize preparation and seek magic

formulations in their attempts for perfection. Second, Phillips and Metzger's clinical data from over 750 clinical observations led them to conjecture that reticence is associated with linguistic signs of schizophrenic behavior (reported by Kasanin, Language and Thought in Schizophrenia, 1964), since reticents show slow patterns of response to cues offered them avoid looking at people to whom they speak, demonstrate lateness in accepting overtures to move into conversation, and sit on group fringes and "drift off" into their own thoughts. Third, these clinicians report associations of reticence with learning problems, particularly indecisiveness resulting from not understanding what is expected of them, given the social cues of a particular situation. Fourth, the same report associated reticence with social marginality. They seem to have difficulty relating to the norms and rules of the social situations expected of them. In that connection, Phillips and Metzger report an unusually large number of individuals with this problem come from first or second generation ethnic families and an inordinate number from rural regions. Finally, this report revealed that reticents have low self-esteem and feelings of worthlessness. The critical methodological problem in this report, admitted by the authors, is the clinical nature of the data. However, the reports cited earlier provide a broad survey coverage which along side of the clinical data, form an important framework for understanding the nature of reticence and of communication apprehension.

That communication apprehension correlates with self-esteem persists in the literature. For example, Lustig (1974) found a

-.48 correlation between communication apprehension and self-esteem and -.52 correlation between communication apprehension and self-acceptance. Utilizing a wide variety of subjects' populations, McCroskey, Daly, Richmond, and Falcione (1977) found correlations between self-esteem and communication apprehension ranging from -.52 to -.72. Similar findings have been reported by Snavely and Sullivan (1976) and Snavely, Merker, Becker, and Brook (1976).

Research consistently marks the correlation between communication apprehension and introversion. In addition to studies already cited indicating this relationship, Huntley (1969) found a correlation of .36 between communication apprehension and introversion. In that light, it appears that introversion may relate to unwillingness to accept change. For instance, in his thesis, Witteman (1976) reported a -.45 correlation between communication apprehension and willingness to accept change.

From the several studies illustrating the correlations of communication apprehension with selected factors and variables, a profile emerges that may best be described in the words of McCroskey (1977):

> The picture of the person with a high level of CA that emerges from these studies generally is a negative one. Such a person might be described as typically an introverted individual who lacks self-esteem and is resistant to change, has a low tolerance for ambiguity, and is lacking in self-control and emotional maturity. Persons at the other end of the continuum, on the other hand, might be described as typically adventurous, extroverted, confident, emotionally mature individuals with high self-esteem, tolerant of ambiguity, and willing or even eager to accept change in their environment (p. 84).

Communication Avoidance Behavior

A number of studies have confirmed the hypothesis that individuals with high communication apprehension avoid communication behaviors. For instance, McCroskey and Leppard (1975) found that high communication apprehensives typically chose housing (dorm rooms, trailers, or houses) that had been identified through previous research as less interactive in its position. Weiner (1973) identified their avoiding seating in a small group setting that demanded interaction or placed the individual in a focal position or a position of influence. McCroskey and Sheahan (1976) also found that individuals with high communication apprehension sought reclusive positions in a college classroom setting, positions usually on the periphery of the room (sides of the room and back). The extent of this classroom, group and housing avoidance extends even into the preference of large lecture classes over small classes that involved participation among college students in their class preferences (McCroskey and Andersen, 1977).

Just as communication apprehension results in several quantitative effects on communication behavior, notably avoidance behavior, its effect on qualitative aspects has been documented as well. For instance, Hamilton (1972) reported that high communication apprehensives engage in less self-disclosure, than low communication apprehensives. It should be noted that self-disclosure, particularly refined in its conception by Sydney Jourard, relates to several aspects of mental well being. Jourard (1964) particularly hypothesized a curvilinear relationship between self-disclosure

and mental health, with either too much or too little self-disclosure becoming dysfunctional to the achievement of a state of well-being and mental health. McCroskey (1978) cited the earlier work by Wells and Lashbrook indicating that the comments of high oral apprehensives are much less relevant to the topic in a group discussion than the comments of individuals with low communication apprehension. In addition, high communication apprehensives reveal more tension in small groups (Sorensen and McCroskey, 1977), produced fewer original ideas in brainstorming groups (McCroskey, 1978), and generally vocalized more rhetorical interrogatives (you know? you see? okay? etc.). (see also Powers, 1978).

Communication avoidance behaviors also influence occupational choice. The available data show that subjects typically avoid occupations which they themselves rated as having high communication demands (Daly and McCroskey, 1975). Even when status and economic concerns were clearly perceived in the high communication occupations, the high communication apprehensives preferred the low communication occupations. Follow-up research revealed a similar trend among federal government employees; also, the federal employees actually held jobs that conformed to their preferences (McCroskey, 1978).

McCroskey (1970) found that fifty to seventy percent of high communication apprehension students would drop the required speech class at a certain university. Moreover, several studies suggest that the apprehensive person will talk less in a small group setting, will engage in less self-disclosure than other people (Hamilton, 1972), and interact less with peer strangers (McCroskey

and Sheahan, 1976). Demographically, the research suggests occupations that require less communication to be preferred by high apprehensives (Daly and McCroskey, 1975), will prefer housing more remote from centers of interaction (McCroskey and Leppard, 1975). Persons with high apprehension have been perceived as less socially attractive, less task attractive, less competent, less sexually attractive, less attractive as communication partners, less sociable, less composed and less extroverted (McCroskey, Daly, Richmond, and Cox, 1975).

Occupationally, the degree of communication apprehension affects many facets of this area. Richmond (1977) found that high communication apprehensives were projected to be less satisfied in their job, to have poorer relationships with their peers, supervisors, and subordinates at work, to be less productive and to have less likelihood for advancement in the business organization.

Communication Apprehension and Interpersonal Perception

This condition has been shown to affect interpersonal perception. For instance, people with high communication apprehension, compared with low communication apprehension, are perceived to be less socially attractive, though not less task attractive (McCroskey, Daly, Richmond, Cox, 1975). A similar study measuring interpersonal perception revealed that high communication apprehensives in comparison with low communication apprehensives were perceived as less sociable, less composed, less competent, less extroverted but high in character (McCroskey and Richmond, 1976). The same study revealed that individuals with high communication apprehen-

sion, as perceived by their peers, are predicted to be less successful in business and to exhibit less opinion leadership. Hurt and Joseph (1975) substantiated this point about less opinion leadership, and also less friendship, among seventh grade students, just as similar results have been found among senior high and college students (McCroskey, 1978).

Not only does the perception of high communication apprehension generate negative expectations of a person's future success in the academic and the business world, but field studies confirm those perceptions and expectations. McCroskey and Daly (1976) reported that school teachers comparing descriptions of students with high and with low communication apprehension typically projected lowered academic achievement in all subjects in the elementary curriculum, less satisfactory relationships with other students, and a lowered potential for future academic success. In the area of job application and selection, simulation laboratory experiments have shown that high communication apprehensives, compared with low, are perceived to be less competent, less satisfied with their job, less able to maintain relationships with peers and supervisors, less productive, to require more training, and to be less likely to advance in the organization (Richmond, 1977; Daly and Leth, 1976).

Harris (1977) reported that dyadic pairs of high communication apprehensives working at a task reported attitudes of less trust, satisfaction, and liking toward their partners than similar pairs of low communication apprehensives or high-low pairs. The high apprehensive pairs also performed less efficiently (in terms of time and quality).

Communication Apprehension and Personal Well-Being

As mentioned earlier, individuals who rated 31 occupations according to their communication demands also rated their preferences for those jobs. Subjects classified as high in communication apprehension consistently chose jobs with low communication demands, even at the expense of economic and status rewards (Daly and McCroskey, 1975). Subsequently in a field study of a large sample of government employees, this professed choice was evident (Scott, McCroskey and Sheahan, press). People with high communication apprehension are less likely to be offered a job interview and less likely to be offered a job than people with low communication apprehension (Daly and Leth, 1976; Richmond, 1977; McCroskey, 1977).

Although apprehensives do find employment, some evidence indicates higher levels of job dissatisfaction among this group. In studying federal employees, Falcione, McCroskey and Daly (1977) reported a correlation between high communication apprehension and job dissatisfaction, especially with supervisors and actual work performed. Similar results were reported in this same study concerning satisfaction with teaching supervisors for a large sample of public school teachers. In a study of college students dyads working at a problem-solving task, Harris (1977) found significant levels of dissatisfaction toward partners with high levels of communication apprehension. High communication dyads also performed less efficiently than the lows.

The impact of communication apprehension upon personal well-being and life has also been supported. Its effect on lower overall grade-point averages in junior high through college and lower standardized achievement tests after completion of high

school has been documented (McCroskey and Andersen, 1976; Bashore, 1971). One study even found that high communication apprehensives were less likely to register to vote than low communication apprehensives (Sheahan, 1976; McCroskey, 1977). Despite these differences, no significant differences have been found concerning communication apprehension and intelligence (Bashore, 1971; McCroskey, Daly and Sorenson, 1976).

On balance, it appears that high communication apprehension results in negative impacts on personal self, interpersonal perceptions, economic, academic, social and political life. Such data coupled with consistent survey findings indicating that high communication apprehension affects approximately 20 percent of our population (McCroskey, 1977; McCroskey, 1978; Watson and Dodd, 1979) lead us to conclude serious limitations placed upon individuals experiencing high communication apprehension.

Rationale for the Study

Although numerous variables that affect communication apprehension have been documented, little research has investigated the effects of cultural differences on communication apprehension.

Although high communication apprehension among whites is usually 20 percent, further data on this phenomenon in other cultures is needed. When testing Hawaiian students of Japanese ancestry, almost 61 percent of 702 students perceived themselves to be above average in communication apprehension (Cambra, Klopf and Oka, 1979). The authors attributed this figure to the sociocultural influences, peer-group expectations, and ethnic background. Conversely, when communication apprehension among Korean students

was measured, only 2.7 percent perceived themselves to be almost always highly anxious (Cambra and Klopf, 1979).

Moreover, most sociologists and psychologists agree that in this country the average minority person has been conditioned in quite a different way than the white majority. The minority student, specifically in this case the black student, may have communication behaviors which differ from those of the majority culture. Many facets of the problem must necessarily be discovered to thus provide insight later into methods for alleviating the problem.

The thrust of the present research is to identify the prevalance of communication apprehension comparing foreign, black, and white students. In this study, we looked for differences among these three diverse groups across four communication areas: talking with an authority figure, interaction in a social situation, talking in a group situation, and communicating in public speaking.

The researchers asked a central question concerning the existence of differences of self-reported communication behaviors depending on interactions of culture and communication on measures of communication behavior.

If culture makes an impact on communication behavior, and we believe it does, then it is reasonable to assume that communication anxiety differences should also show up. At this point, we are not predicting the direction of those potential differences, only that we expect some differences among three somewhat cultural clusters: foreign students (mostly Latin American and Middle Eastern), American blacks, and American whites.

Methodology

Subjects

From a survey of basic English and speech classes, foreign, black and white subjects were screened to locate individuals high and low in communication apprehension, using a technique of one above and below the mean on standard deviation. From the screening the researcher was able to locate eighty-three non-apprehensive and sixty-four apprehensive foreign, black and white subjects. Foreign students included: Latin American (63%), Middle Eastern (23%), Asian (7%), European (7%).

Procedures

Subjects were identified as foreign students, black and white. Then subjects were also grouped into low communication apprehensive (LCA) and high communication apprehensive (HCA) based on the standard deviation method. These two independent variables were examined in relation to their main and interaction behavior: talking with an authority figure, social conversation, group discussion, and public speaking.

Measuring Instruments

PRCA. The Personal Report of Communication Apprehension is a well-known scale with an internal reliability ranging from .92 to .96 (McCroskey, 1978).*

CRSOCA. The CRSOCA is a Likert-type self-report scale consisting of thirty-two statements, eight statements each dealing

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*A new 24 item scale has recently been developed by McCroskey (1982), supplanting the 25-item PRCA. The PRCA-24 measures group interaction, discussion meeting, dyadic, and public communication dimensions.

with attitudes toward communicating with authority figures, social conversation, group discussion, and public speaking. Reliability for the scale with this group of subjects was as follows: authority figure - .74; social conversation - .64; group discussion - .85; and public speaking - .92. The acronym stands for Comparative Rating Scale of Oral Communication Areas, a scale developed by Watson (1979). (See also Watson and Dodd, 1980)

Data Analysis

Using a 2-way ANOVA, the researchers examined the effects of the three cultural differences (foreign student, black, white) and the two CA conditions (LCA and HCA). Significant differences in the ANOVA for the four dependent variables (communication with authority figures, social conversation, group discussion and public speaking) were followed by the critical difference post-hoc test to determine cell differences (Bruning and Kintz, 1968, pp. 112-114).

Results

From the following tables, it will be noted that a significant difference ($p < .001$) is shown between all non-apprehensive and apprehensive groups toward the four communication variables with the non-apprehensive group showing the lower score, that is, the least concern on the CRSCOCA (Tables 1-4). This finding is to be expected. However, we now turn to each of the four communication areas.

Authority figure

Toward authority figures, there were significant main effects for the CA ($p < .001$ and cultural group variables ($p < .009$). The

LCA group showed 19.73 and the HCA group showed 23.31 ($p < .001$). As Table 5 also reveals, when we combine LCAs and HCAs for each cultural group, we obtain another statistical main effect for culture, showing that whites have more concern over talking with authority figures (23.39) than the foreign students (19.73). Whites did not differ significantly from blacks, nor did blacks differ significantly from the foreign students. No interaction occurred.

Social Conversation

A significant main effect on social conversation was the only significant finding, once again indicating the LCAs were significantly lower on social conversation (20.75) than HCAs (24.59). No interaction of culture or CA was evident on this variable.

Group Discussion

Group discussion main effects resulted in concern toward communication ($F = 41.29$, $P < .001$) and a two-way interaction of communication apprehension by culture ($F = 3.04$, $P < .051$). The main effect, again attitude, showed overall difference between non-apprehensives (19.95) and apprehensives (25.83). The interaction, however, revealed a significant difference within the high communication apprehension condition, indicating that the foreign and black samples (24.67, 24.13) differed significantly from the white sample. The white HCAs reported a much greater concern (27.43) toward group discussion than these two other cultural groups (Tables 3 and 7).

Public Speaking

Again, there was a main effect for public speaking, indicating HCAs were more concerned than LCAs overall (Table 4). Also, another

main effect for the overall cultural differences, across an averaging of LCAs and HCAs, revealed that whites and blacks were not significantly different from each other, although both were markedly different from the foreign students. However, the interaction patterns were not significant on the public speaking concern variable.

Discussion

The comparison between low and high communication apprehensives allowed us to see a consistent difference between LCA subjects and HCA subjects. On each factor of the Comparative Rating Scale of Oral Communication Apprehension (CRSOCA), LCAs were significantly different from HCAs across all four factors: authority figures, social conversation, group discussion and public speaking. These differences are obvious and were to be expected.

Also, there were main effects indicating cultural differences for the communication toward authority and the public speaking dependent variables. These differences indicate that when the LCAs and HCAs were averaged within each cultural group (i.e., the mean of the black LCAs and black HCAs), then (1) the white group reported significantly more concern than the foreign group for speaking to authority figures and for group discussion. (2) Also, blacks and whites were similar to each other on public speaking and on communicating with authority figures.

Furthermore, the communication apprehension by culture interaction indicated that among HCAs, whites were significantly higher in concern over group discussion than blacks or foreign students. It is also interesting, within all the potential inter-

actions, for the four dependent variables, that little difference among mean scores occurred within the LCA subjects across the three cultural clusters studied.

In essence, the study raises the intriguing question of why whites and blacks report greater amounts of worry than the foreign students in this study. In fact, it is more accurate to speak of a cluster of American whites and American blacks who are statistically similar in every comparison, except one. That one occurs where among HCAs only, blacks exhibit characteristics similar to the foreign students, but characteristics different from the white students. Nevertheless, whites along with blacks are reporting comparative differences with foreign students. And the question is why that difference is occurring.

First, we should note that these differences appear in the authority and public speaking factors, not in the social conversation and group discussion dimensions. One suggestion here is that white Americans feel some kind of greater demand in the public speaking situation to succeed. Or, with those who hold power, a need exists to demonstrate competency to authority figures. Consequently, there may be a self-demand for performance, suggesting an intraexpectancy paradigm. One motivational quality among the high CA whites, in particular, may be a high demand for performance. They believe such performance is important, perhaps necessary, but being high communication apprehensives, they feel incompetent to perform such speech acts. Thus, they naturally report greater concern than their contrasting foreign counterparts in the study.

Furthermore, this achievement demand has possibilities, in American culture at least, for these authority and public speaking situations posed in the CRCOSA. The achievement demand is culturally based in competitiveness and success orientation in a demanding way, culturally unique from the foreign student culture. In other words, American whites and sometimes American blacks experience more intense concern over communicatively demanding situations than the foreign students in the sample. The reason stems possibly from demand achievement or competition.

A second and related explanation comes from role expectancy. In non-threatening interpersonal situations, such as social interaction and to some extent group discussion, the social rules provide one with some sense of control. The demands to perform with authority figures or in a public speech, however, remind the subject of a role related set of performance rules, norms which perhaps in the mind of the speaker provide cues of no control. The foreign students, perhaps feel no role performance or competition expectancies. Competitively excelling in speaking performance is not a cultural demand for them. And, the negative cues associated with things like authority figures and public speaking just are not aroused with that group.

The cultural effects of achievement demand based on competition, its related concepts of inter-expectancy, role expectancy, and social cues of high or low control are pre-theoretical notions at this time to explain these phenomena. Had we controlled for some other factors, such as using the world view scale (factors: fate control, interpersonal control, impersonal force control, predestined control) or locus of control as covariants, then per-

haps clearer theoretic reasons would emerge. If we could measure or somehow compare achievement demands, then it seems reasonable to assume those demands would have some impact on communication behavior.

Since the sample of foreign students in this study included 63% Latin Americans and 23% Middle Eastern students, the findings suggest that this cluster of 86% of our sample are lower on the communication variables measured than American students sampled. This report is consistent with antecedotal reports that we have heard and observed about these two particular cultural groups, as one Brazilian informant recently said, "People in Brazil and in Central American (where she had lived also) hardly feel any worry about saying what they feel." If studies like this one can be continued across a number of cultural clusters, we may eventually be in a position to understand more fully communication apprehension as a cultural phenomenon.

TABLE I

EFFECTS OF COMMUNICATION APPREHENSION AND CULTURE TOWARD AUTHORITY FIGURES

authfig
by comm. culture

Source of Variation	Sum of Squares	DF	Mean Square	F	Signif of F
Main Effects	648.829	3	216.276	11.198	0.000
Comm	278.083	1	278.083	14.398	0.000
Culture	186.326	2	93.163	4.824	o.009
2-Way Interactions	54.365	2	27.182	1.407	0.248
Comm, Culture	54.364	2	27.182	1.407	0.248
Explained	703.194	5	140.639	7.282	0.000
Residual	2723.211	141	19.314		
Total	3426.405	146	23.469		

TABLE 2

EFFECTS OF COMMUNICATION APPREHENSION AND CULTURE TOWARD AUTHORITY FIGURES

social
by comm culture

Source of Variation	Sum of Squares	DF	Mean Square	F	Signif of F
Main Effects	553.485	3	184.495	10.737	0.000
Comm	503.181	1	603.181	29.284	0.000
Culture	18.759	2	9.379	0.546	0.581
2-Way Interactions	11.573	2	5.786	0.337	0.715
Comm, Culture	11.573	2	5.786	0.337	0.715
Explained	565.057	5	113.011	6.577	0.000
Residual	2422.778	141	17.183		
Total	2987.836	145	20.465		

TABLE 3

EFFECTS OF COMMUNICATION APPREHENSION AND CULTURE TOWARD AUTHORITY FIGURES

groups
by comm culture

Source of Variation	Sum of Squares	DF	Mean Square	F	Signif of F
Main Effects	1280.283	3	426.761	16.963	0.000
Comm	1038.879	1	1038.879	41.293	0.000
Culture	32.465	2	16.233	0.645	0.526
2-Way Interactions	152.987	2	76.494	3.040	0.051
Comm, Culture	152.987	2	76.493	3.040	0.051
Explained	1433.270	5	286.654	11.394	0.000
Residual	3547.422	141	25.159		
Total	4980.691	146	34.114		

TABLE 4

EFFECTS OF COMMUN
EFFECTS OF COMMUNICATION APPREHENSION AND CULTURE TOWARD AUTHORITY FIGURES

public
by comm culture

Source of Variation	Sum of Squares	DF	Mean Square	F F	Signif of F
Main Effects	3403.516	3	1134.505	25.543	0.000
Comm	1915.898	1	1915.898	43.136	0.000
Culture	584.101	2	292.051	6.575	0.002
2-Way Interactions	194.410	2	97.205	2.189	0.116
Comm, Culture	194.410	2	97.205	2.189	0.116
Explained	3597.930	5	719.586	16.201	0.000
Residual	6262.613	141	44.416		
Total	9860.543	146	67.538		

TABLE 5

MEANS OF COMMUNICATION APPREHENSION AND CULTURE TOWARD AUTHORITY FIGURES*

Culture	LCA	HCA	Means of Main Effect
Foreign	19.09 (46)	21.39 (18)	19.73a (64)
Black	20.50 (18)	22.00 (16)	21.21ab (34)
White	20.58 (19)	25.17 (30)	23.39b (49)
Means of Main Effect	19.73 (83)	23.31 (64)	21.29 (147)

* Subscripts that differ are significantly different. Critical difference test = 2.46 in this instance.

TABLE 6

MEANS OF COMMUNICATION APPREHENSION AND CULTURE TOWARD SOCIAL CONVERSATION*

Culture	LCA	HCA	Means of Main Effect
Foreign	21.11 (46)	24.50 (18)	22.06 (64)
Black	20.22 (18)	23.81 (16)	21.91 (34)
White	20.37 (19)	25.07 (30)	23.24 (49)
Means of Main Effect	20.75 (83)	24.59 (64)	22.42 (147)

* The HCAs are significantly greater than the LCAs - ($F = 29.28$, $p<.001$). No significant interaction occurred in this relationship.

TABLE 7

MEANS OF COMMUNICATION APPREHENSION AND CULTURE TOWARD GROUP DISCUSSION*

Culture	LCA	HCA	Means of Main Effect
Foreign	19.89a (46)	24.67b (18)	21.23 (64)
Black	21.06a (18)	24.13b (16)	22.50 (34)
White	19.05a (19)	27.43c (30)	24.18 (49)
Means of Main Effect	19.95 (83)	25.83 (64)	22.51 (147)

* Subscripts that differ are significantly different. Critical difference test = 2.81 in this instance.

TABLE 8

MEANS OF COMMUNICATION APPREHENSION AND CULTURE TOWARD PUBLIC SPEAKING*

Culture	LCA	HCA	Means of Main Effect
Foreign	20.98 (46)	25.78 (18)	22.33a (64)
Black	23.28 (18)	31.38 (16)	27.09b (34)
White	23.11 (19)	33.50 (30)	29.47b (49)
Means of Main Effect	21.96 (83)	30.80 (64)	25.81 (147)

* Subscripts that differ are significantly different using critical difference = 3.73. No significant interaction occurred in this relationship.

APPENDIX A
CRSOCA

DIRECTIONS: This instrument is composed of 32 statements concerning your communication with other people. Please indicate the degree to which each statement applies to you by marking whether you (1) Strongly Agree, (2) Agree, (3) Are Undecided, (4) Disagree, or (5) Strongly Disagree with each statement. There are no right or wrong answers. Work quickly, just record your first impression. Note: Scores are eventually reversed and calculated such that the high number equals high concern.

Authority

_____1. I have no difficulty speaking to professors.

_____2. I tend to avoid office conferences with professors.

_____3. I am unable to talk to professors after class.

_____4. I get frightened when professors try to talk to me.

_____5. I am not afraid of job interviews.

_____6. Conversing with people who hold positions of authority causes me to be fearful and tense.

_____7. I feel at ease when talking to a doctor.

_____8. I am able to talk easily with sales people.

Social Conversation

_____9. While participating in conversation with a new acquaintance I feel very nervous.

____10. I am not afraid to speak up in conversations.

____11. I feel nervous when I have to speak to others.

____12. During a conversation, I prefer to talk rather than listen.

____13. My friends and family listen to my ideas and suggestions.

____14. I do not seem to be able to start conversations with strangers.

____15. I talk a lot when I am with my friends.

____16. When I talk to people they ask me to repeat what I have said because they do not understand it.

Group Discussion

____17. I cannot ask questions in class.

____18. I cannot contribute to class discussions.

____19. I do not contribute much to committees.

_____20. I look forward to expressing my opinions at meetings.

_____21. I am not afraid to express myself in a group.

_____22. I am tense and nervous while participating in group discussion.

_____23. I have no fear about expressing myself in a group.

_____24. I like to get involved in group discussion.

Public Speaking

_____25. I have no fear of facing an audience.

_____26. I look forward to an opportunity to speak in public.

_____27. My hands tremble when I try to handle objects on the platform.

_____28. I always avoid speaking in public if possible.

_____29. I am fearful and tense all the while I am speaking before a group of people.

_____30. My thoughts become confused and jumbled when I speak before an audience.

_____31. I feel relaxed and comfortable while speaking.

_____32. I face the prospect of making a speech with complete confidence.

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